Express Mail Label No. EV 334259375US Title: SINGLE-CHIP MULTI-PORT ETHERNET

SWITCH

Inventor(s): Harish R. Devanagondi, et al.

Atty. Docket No.: 23019-07336

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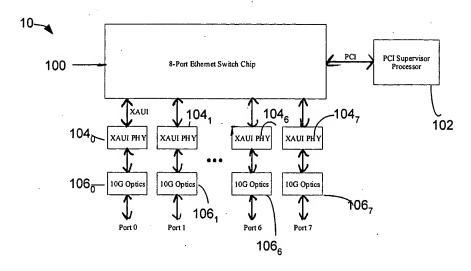


FIG. 1

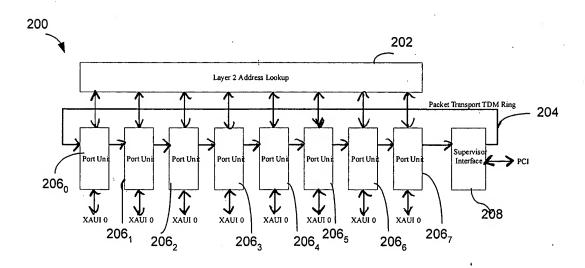


FIG. 2

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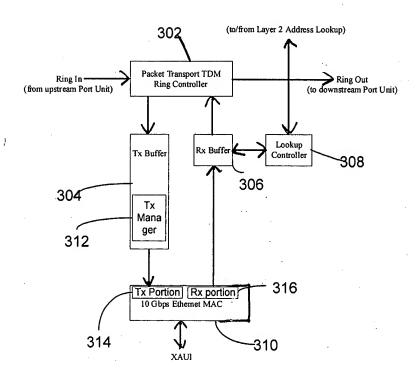


FIG. 3

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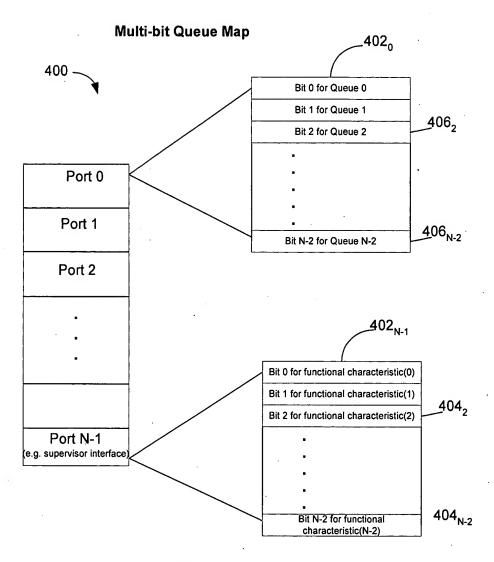


FIG. 4

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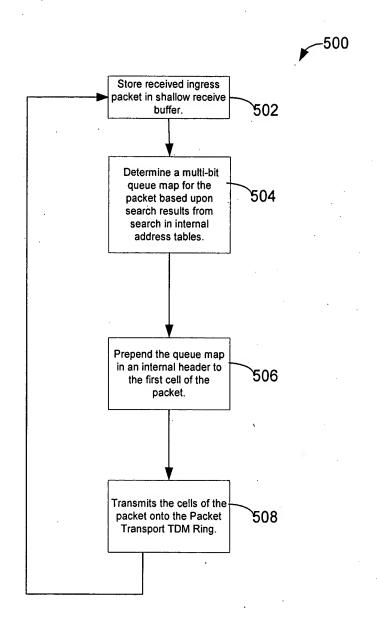


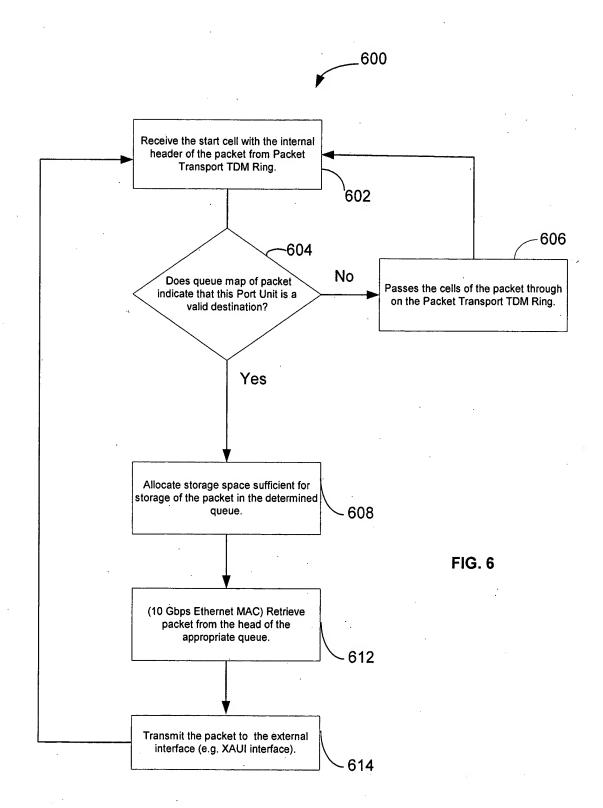
FIG. 5

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Atty. Docket No.: 23019-07336 Sheet 6 of 9 702 Receive cell of a packet. 700 -703 Does cell header information indicate this is a cell of a packet whose other cells are currently Yes being stored in the transmit 712 Determine destination queue within the buffer? transmit buffer from the packet source in the cell header. 704 is it a start cell of a Store cell contiguously after the last previously received cell for its associated packet in the allocated memory context for the packet source packet destined for this port? associated with the packet in the Yes destination queue. 706 Determine destination queue within the transmit buffer from queue map. 718 Yes s there already allocated a data Allocate within that memory correlator for a memory context sufficient space for this context for the packet packet based on its length. source of this packet? No Store the cell. 720 Allocate within the destination queue a memory space context of sufficient space for this packet based on its length and a data correlator to its start cell. 724 Store the cell. FIG. 7

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ETHERNET SWITCH

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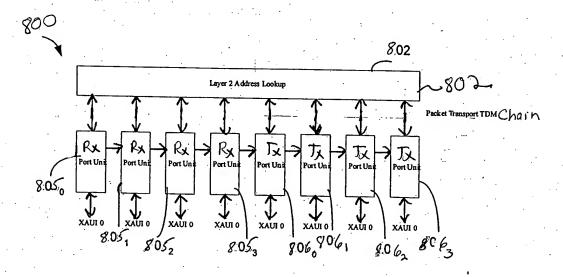


FIG. 8,

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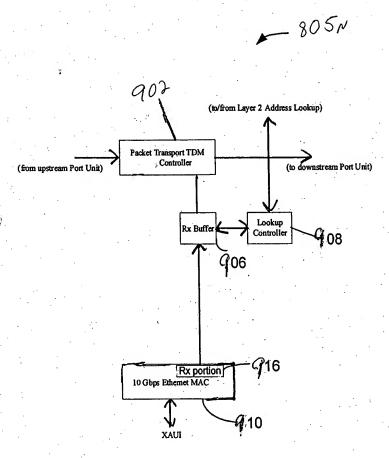
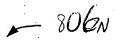


FIG. 9 A

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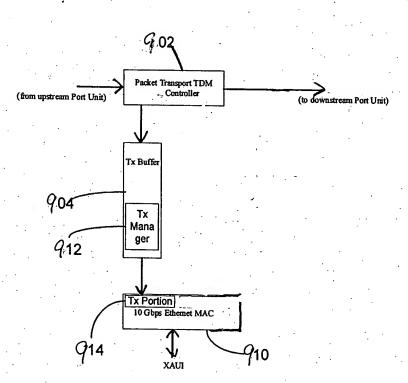


FIG. 9B